WisDOT Profiler Verification 2007

Profiler Requirements:

1) Capable of producing International Roughness Index (IRI) measurements on HMA or PCC Pavement or both.
2) Capable of automated starting and stopping of data collection within two feet of prescribed locations.
3) Capable of automated document point location and relocation for all features that are required to be identified by the specification and any other features that may have a bearing on the ride quality of the pavement being measured. (i.e. bridge approaches, intersections, box culverts, manholes, super elevation transitions, etc.)
4) Capable of accurately locating and relocating bumps over 0.4 inches in 25 feet.
5) Capable of producing ERD files that can be used in ProVal and other analysis software used to determine IRI and other ride measurement values as well as corrective measure simulations.

All profiling devices will be required to make five repeat runs on two wheel paths on selected sections of HMA or PCC pavement or both and determine the IRI for each run on each pavement type.

The high and low IRI runs on each pavement type will be removed from the data analysis and the remaining three runs on each pavement type will be used in determining approval for the device for use on WisDOT contracts.

Each run on each pavement type and the average of the three runs will be compared against the results of testing performed by WisDOT on the same test sections using the SurPro 2000 Rolling Profiler manufactured by International Cybernetics Corporation.

Acceptance will be based on the repeatability of the data produced and the ability to match the WisDOT results from the SurPro 2000.

The specific data collection and analysis software versions and software settings used for a profiler for approval testing are the settings that will be used for future testing.
After performing smoothness testing on projects, contractor must submit a printout indicating serial number of the device and the software versions and settings used for data collection and analysis.

Project acceptance testing must be done with equipment that is approved for use on WisDOT contracts.

Profiler approval retesting is required when any equipment or software related to the collection or analysis of data is repaired, replaced or upgraded or when test results are suspect or erratic.

Contractors are encouraged to identify a local reference site to perform periodic checks on their profiler to assure it continues to operate properly and results are reasonable.

It is the contractor's responsibility to properly operate, maintain, repair and upgrade equipment as required insuring compliance with the requirements for profiling device approval and use.

Please notify Terry Treutel @mail: terry.treutel@dot.state.wi.us, Phone: 608-246-5393 or Cell: 608-516-6360 to arrange for profiler approval testing or retesting when necessary.

When profiling devices have been approved for use, an ID tag will be sent out to be attached to the device and each approved device will be identified on the following website:

http://roadwaystandards.dot.wi.gov/standards/qmp/profilers.pdf